

CLAIMS

1. An operating method for a machine tool (1) controlled by a control device (5), wherein the control device (5) processes a step sequence (S1-11) and, during processing of the step sequence (S1-11), wirelessly reads out at least one part program (18) from a workpiece data carrier (15) assigned to a workpiece (3) and machines the workpiece (3) in accordance with the part program (18) read out.
2. The operating method as claimed in claim 1, characterized in that the part program (18) has a number of individual steps (19) to be sequentially executed, in that the control device (5) also reads out from the workpiece data carrier (15) a program pointer (20) assigned to the workpiece (3), in that the control device (5) begins executing the part program (18) with an individual step (19) indicated by the program pointer (20), and in that, on ending execution of the part program (18), the control device (5) transmits a new program pointer to the workpiece data carrier (15) so that the program pointer (20) stored in the workpiece data carrier (15) is updated.
3. The operating method as claimed in claim 2, characterized in that a plurality of identical workpieces (3) that are to be machined identically are assigned to the workpiece data carrier (15), and in that the control device (5) reads out the part program (18) for all workpieces (3) only once from the workpiece data carrier (15).
4. The operating method as claimed in claim 1, 2 or 3, characterized in that the control device (5) reads out a description of the workpiece (3) from the workpiece data carrier (15).

5. The operating method as claimed in claim 4, characterized in that the description includes the original geometric dimensions of the workpiece (3).
6. The operating method as claimed in claim 4, characterized in that the description includes the current geometric dimensions of the workpiece (3) immediately prior to machining of the workpiece (3) by the machine tool (1).
7. The operating method as claimed in claim 5 or 6, characterized in that the control device (5) takes account of the geometric dimensions of the workpiece (3) as part of a collision check.
8. The operating method as claimed in one of claims 4 to 7, characterized in that the description of the workpiece (3) also includes information about the workpiece (3) material.
9. The operating method as claimed in claim 8, characterized in that the control device (5) measures the actual power input of drives of the machine tool (1) during workpiece (3) machining and compares it with threshold values, in that the control device (5) adjusts the further machining of the workpiece (3) and detects tool breakage if the actual power input exceeds the threshold values, and in that the control device (5) adjusts at least one of the threshold values depending on the information about the workpiece (3) material.
10. The operating method as claimed in claim 8 or 9, characterized in that the control device (5) adjusts a machining rate at which it machines the workpiece (3) depending on the material information.
11. The operating method as claimed in one of the above claims, characterized in that the control device (5) also reads out a workpiece identifier from the workpiece data carrier (15).

12. The operating method as claimed in one of the above claims, characterized in that the control device (5) reads out a description of a minimum requirements profile from the workpiece data carrier (15), in that the control device (5) compares the minimum requirements profile with the capabilities of the machine tool (1), and in that the control device (5) commences machining the workpiece (3) only if the capabilities of the machine tool (1) match the minimum requirements profile.
13. The operating method as claimed in one of the above claims, characterized in that, during processing of the step sequence (S1-S11), the control device (5) wirelessly reads out component data from a component data carrier (12) assigned to an additional component (2) of the machine tool (1) and takes it into account when processing the step sequence (S1-S11).
14. The operating method as claimed in claim 13, characterized in that the component data includes geometric dimensions of the additional component (2), and in that the control device (5) takes account of the dimensions of the additional component (2) during a collision check.
15. The operating method as claimed in claim 13 or 14, characterized in that the component data includes status data such as, for example, operating hours and wear as well as the type and number of machining operations, and in that the control device (5) transmits the updated values of said additional data to the component data carrier (12) once the workpiece (3) has been machined.
16. The operating method as claimed in claim 13, 14 or 15, characterized in that the control device (5) also transmits a machine tool identifier and/or a user identifier to the component data carrier (12).

17. A program data carrier having an operating program (7) stored on the program data carrier for implementing an operating method as claimed in one of the above claims.
18. A workpiece data carrier assigned to a workpiece (3), in which a part program (18) for machining the workpiece (3) is stored.
19. The workpiece data carrier as claimed in claim 18, characterized in that the part program (18) has a number of individual steps (19) to be sequentially executed, and in that a program pointer (20) which indicates one of the individual steps (19) is also stored in the workpiece data carrier.